ICSI

British Infertility Counselling Association

British Fertility Society

British Andrology Society

The Association of Clinical Embryologists

Association of Biomedical Andrologists

ICSI (Intra-cytoplasmic sperm injection) is an alternative method used for fertilising eggs in IVF. It is used in cases where there are too few sperm for conventional IVF or when conventional IVF has failed to fertilise any eggs. It can also be used in cases of men who do produce sperm, but whose sperm cannot be ejaculated; for example, men who have had a vasectomy.

Proceeding through an ICSI cycle, from the patients' perspective, is no different to a conventional IVF cycle. The only difference is how the eggs are inseminated with sperm:

- **The eggs are "cleaned" by having the surrounding cells removed. This allows the embryologist to assess whether or not the eggs are at the correct stage of development to be injected with sperm.**
- **If the eggs are not at the correct stage of development it is not possible to inject them. It is normal for some eggs to be 'immature'.**
- **Sperm is collected, either by ejaculation or by surgical sperm retrieval, and prepared so that only the healthiest sperm are used for the ICSI.**
- **The embryologist looks at the sperm sample using a microscope and selects individual sperm that are swimming (motile) and appear normal.**
- **The individual healthy sperm are injected into each mature egg using a special microscope called a micromanipulator.**
- **The following day the eggs are checked to see if they have fertilised and the cycle proceeds towards embryo transfer and freezing in the same way as conventional IVF.**

The advantage of ICSI is that it offers men who have poor or very few sperm the chance to become a father using their own sperm. However, because the eggs are at risk of damage when they are "cleaned" and injected with sperm, ICSI is not recommended for all couples as in cases where ICSI is not indicated standard IVF treatment will offer patients the same chances of success.

Prepared for the UK Professional Fertility Societies by The Association of Clinical Embryologists